

**ABSTRACT OF THE DISCLOSURE****DIENE-MODIFIED  
PROPYLENE COPOLYMERS**

Certain specific embodiments of the inventions will now be discussed. For example, a process of preparing a copolymer composition that includes a diene-modified polypropylene copolymer is described, which process includes: contacting a metallocene catalyst compound with a polymerization medium that includes at least a propylene monomer and an  $\alpha$ , internal non-conjugated diene monomer; and conducting polymerization of the monomers in the presence of the metallocene catalyst compound for a time sufficient to provide a diene-modified polypropylene random copolymer that includes monomeric units derived from each of the monomers, and having from 0.0 wt% to 2.0 wt% ethylene and a heat of fusion of 25 J/g or more.